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Identifying numbers:

Proposal No. 555
Contract No. NAS5-21871
User ID No. UN240

E7.3 10002

CR-129933

Title: Mapping of dune fields in inaccessible regions.

Principal Investigator: H. T. U. Smith, University of Massachusetts.

Coverage received: Some coverage has been received for all of the test areas except the following, for which none has been received:

Test area A (data reqmt no. 1) - South West Africa

Test area C (" " " 5) - Asia, Gobi Desert

Complete coverage, however, has not been received yet for any area.

Evaluation of products received:

70 mm. negatives: too dense to be usable with standard darkroom equipment; information content may be up to specifications, but extraction of that information is impossible without special equipment not at hand.

9 x 9 in. positive transparencies: quality fair to superb, varying presumably with atmospheric conditions at time of recording; resolution surpasses expectations.

Work done to date: This has consisted mainly of evaluating products and developing procedures for indexing and filing incoming materials. Since the format of the product received is different from than originally requested, procedures originally planned have required extensive modification.

It is concluded that Band 4 is least satisfactory for the investigation planned, and that Band 5 is perhaps the best for all-purpose use, with 6 and 7 close behind.

Problems: These have arisen primarily from the format of the materials received. Since no paper prints have been received, nor any negatives usable for making such prints, the mosaicing which had been planned as an essential part of the investigation could not be carried out. The 9 x 9 positive transparencies received, although excellent for study of individual scenes, can be used only with a light table, and obviously are unsuited for mosaicing. Effects of geometric distortion inherent in the MSS imagery are yet to be evaluated, owing to lack of specific data, but may be adverse for mosaicing.

Recommendations:

1. That usable negatives be provided.
2. That paper prints for one band (preferably 5 or 6) be supplied.
3. That specific information on nature and extent of geometric distortion be made available.
4. That each P. I. be advised as to what other investigators have test areas which coincide with or overlap his own, so that work may be coordinated.

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(E73-10009) MAPPING OF DUNE FIELDS IN
INACCESSIBLE REGIONS Progress Report
(Massachusetts Univ.) 1 p HC \$3.00

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